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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,923	08/04/2003	Takashi Nozu	040447-0251	4950

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EXAMINER

CHEN, WENPENG

ART UNIT PAPER NUMBER

2624

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,923

Applicant(s)

NOZU, TAKASHI

Examiner

Wenpeng Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/4/03, 6/6/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Drawings

1. Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- Page 3 recites reference 4. However, reference 4 is not shown in the specification.
- The numeral "404" in page 10 shall be changed to "804".

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

-- In page 9, the specification refers to reference 1 for teaching extracting a necessary minimal of code. In page 1, reference 1 is referred with an embedded hyperlink.

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-- In page 10, the specification refers to reference 2 for teaching expanding method. In page 3, reference 2 is referred with an embedded hyperlink.

Appropriate correction is required.

Claim Objections

4. Claim 4 is objected to because of the following informalities: "B" in line 2, Claim 4 shall be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. Claims 11-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows:

Although Claims 11-15 recited a computer program product embedded on a computer-readable medium, the present specification in page 10 covers at least a situation in which a program is stored in a computer-readable medium of an external device. The program as a product is then transferred as signal through an interface to the system of Fig. 6. As a consequence, the product Claims 11-15 includes a "signal" encoded on a carrier signal with functional descriptive material. The present specification in page 10 does not teach that a computer program is only limited to be stored in memory 802 or in a disk.

While functional descriptive material may be claimed as a statutory product (i.e., a "manufacture") when embodied on a tangible computer readable medium, a "signal" per se does

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not fall within any of the four statutory classes of 35 U.S.C. §101. A “signal” is not a process because it is not a series of steps per se. Furthermore, a “signal” is not a “machine”, “composition of matter” or a “manufacture” because these statutory classes “relate to structural entities and can be grouped as ‘product’ claims in order to contrast them with process claims.” (1 D. Chisum, Patents § 1.02 (1994)). Machines, manufactures and compositions of matter are embodied by physical structures or material, whereas a “signal” has neither a physical structure nor a tangible material. That is, a “signal” is not a “machine” because it has no physical structure, and does not perform any useful, concrete and tangible result. Likewise, a “signal” is not a “composition of matter” because it is not “matter”, but rather a form of energy. Finally, a “signal” is not a “manufacture” because all traditional definitions of a “manufacture” have required some form of physical structure, which a claimed signal does not have. A “manufacture” is defined as “the production of articles for use from raw materials or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting *American Fruit Growers, Inc. v. Brogdex Co.*, 283 U.S. 1, 11, 8 USPQ 131, 133 (1931)).

Therefore, a computer program product including purely “signal” is considered non-statutory because it is a form of energy, in the absence of any physical structure or tangible material, that does not fall within any of the four statutory classes of 35 U.S.C. §101.

NOTE: Refer to Annex IV, section (c) of the USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility”, Official Gazette notice

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of 22 November 2005 (currently at

<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>).

Claim Rejections - 35 USC § 112

6. Claims 11-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims recite a computer program product. There is not adequate teaching for the claims. No codes are disclosed.

Claim Rejections - 35 USC § 102

7. Claims 1-3, 6-8, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsubara (US patent application 20020057843).

Matsubara teaches an image expanding apparatus, comprising:

-- for Claim 1, coding parameter detecting means for detecting coding parameters from an image code; (paragraphs 0066, 0101; The level numbers are the coding parameters. When the "i" level data to be extracted, all the level numbers shall be detected to see whether it is an "i" level.)

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-- for Claim 1, expanding parameter designating means for designating expanding parameters; (paragraphs 0066, 0101; The determined image size is used to designate levels "i" and "i+1".)

-- for Claim 1, extracting parameter calculating means for calculating an extracting parameter based on the coding parameters and the expanding parameters; (paragraphs 0066, 0101; The level numbers related to the determined image size are calculated.)

-- for Claim 1, code extracting means for extracting a code necessary for obtaining an expanded image designated by the expanding parameters from the image code with reference to the extracting parameter; (paragraphs 0068, 0101, 0102; Wavelet coefficients associated with the extracted level numbers are extracted and decoded (expanded).)

-- for Claim 2, image expanding means for obtaining an expanded image designated by the expanding parameters based on the extracted code; (paragraphs 0068, 0101, 0102; Wavelet coefficients associated with the extracted level numbers are extracted and decoded (expanded).)

-- for Claim 3, wherein the code extracting means is configured to extract as the extracted code a code having a necessary resolution level of a necessary tile of a necessary layout object. (paragraph 0074; In JPEG2000, an image that can be considered as layout object, is divided into tiles. Each tile is then wavelet decomposed and coded. Therefore, Matsubara also teaches this feature.)

Because Matsubara teaches a system (Figs. 7-8) and computer program product embedded in a computer-readable medium (paragraph 0094) for implementing the above methods, Matsubara also teaches Claims 6-8 and 11-13.

Claim Rejections - 35 USC § 103

8. Claims 4-5, 9-10, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara (US patent application 20020057843) as applied to Claims 1, 3, 6, 8, 11, and 13, and further in view of JPEG2000 Image coding system: Compound Image File Format cited in IDS (Hereafter referred as JPEG2000 CIFF).

Matsubara as discussed above teaches Claims 1, 6, 11, parent claims of 5, 10, and 15, respectively and Claims 3, 8, and 13, parent claims of 4, 9, and 14, respectively.

However, Matsubar does not teach features related to (1) the details recited in Claim 4 and (2) "compound document file format" in Claims 4-5, 9-10, and 14-15.

JPEG2000 CIFF teaches:

-- for Claim 5, JPEG2000 Image coding system with Compound Image File Format;
(Title)

-- wherein the coding parameters include vertical and horizontal sizes in pixels of a page image, the number of layout objects in a page, and the size of a tile, wherein the expanding parameters include an expanded image size proportional to the resolution of the expanded image, the number of layout objects to be displayed, the number of a layout object to be displayed, and an image display area for each layout object. (Fig. A-1 including the JPEG 2000 signature box teaches all the above-listed parameters)

It is desirable to have flexibility to decode compound images based on various conditions. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include JPEG2000 Compound Image File Format in Matsubara's coding/decoding

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system so Matsubara extracts coded data based on JPEG2000 Compound Image File Format because the combination improves decoding flexibility of compound images. The combination thus also teaches:

-- wherein the extracting parameter calculating means is configured to calculate as the expanding parameters a layout object necessary for expanding an image, a tile necessary for each layout object, and a resolution level necessary for expanding an image based on the coding parameters and the expanding parameters

Conclusion

9. The prior art made of record in form PTO-892 and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Wenpeng Chen
Primary Examiner
Art Unit 2624

November 6, 2006

A handwritten signature in black ink, appearing to read 'Wenpeng Chen', with a long horizontal flourish extending to the right.